SEQUENCE LISTING

<110> Seino, Susumu; JCR Pharmaceuticals Co., Ltd.

<120> Protein Rim2

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Lys Glu Glu Glu Lys Glu Gln Ser Val Leu Lys Ile Lys Glu Glu His
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Lys Ala Gln Pro Thr Gln Trp Phe Pro Phe Ser Gly Ile Thr Glu Leu
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Val Asn Asn Val Leu Gln Pro Gln Gln Lys Gln Pro Asn Glu Lys Glu
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Pro Gln Thr Lys Leu His Gln Gln Phe Glu Met Tyr Lys Glu Gln Val

<pre>
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Lys Lys Met Gly Glu Glu Ser Gln Gln Gln Glu Gln Lys Gly Asp
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Gly His Asn Cys Ser Tyr Cys Gln Thr Lys Phe Cys Ala Arg Cys Gly
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Gly Arg Val Ser Leu Arg Ser Asn Lys Val Met Trp Val Cys Asn Leu
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Cys Arg Lys Gln Gln Glu Ile Leu Thr Lys Ser Gly Ala Trp Phe Tyr
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Asn Ser Gly Ser Asn Thr Leu Gln Gln Pro Asp Gln Lys Val Pro Arg
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Gly Leu Arg Asn Glu Glu Ala Pro Gln Glu Lys Lys Ala Lys Leu His
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Glu Gln Pro Gln Phe Gln Gly Ala Pro Gly Asp Leu Ser Val Pro Ala
    225   230   235   240

Val Glu Lys Gly Arg Ala His Gly Leu Thr Arg Glu Asp Thr Ile Lys
              245   250   255

Asn Gly Ser Gly Val Lys His Gln Ile Ala Ser Asp Met Pro Ser Asp
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Arg Lys Arg Ser Pro Ser Val Ser Arg Asp Gln Asn Arg Arg Tyr Glu
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      Gln Ser Glu Glu Arg Glu Asp Tyr Ser Gln Tyr Val Pro Ser Asp Gly
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      Glu Pro Gln Phe Tyr Glu Glu Pro Gly His Leu Asn Tyr Arg Asp Ser
                  325             330                 335

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      Asn Arg Arg Gly His Arg His Ser Lys Glu Tyr Ile Val Asp Asp Glu
              340             345             350

      Asp Val Glu Ser Arg Asp Glu Tyr Glu Arg Gln Arg Arg Glu Glu Glu
 15           355             360             365

      Tyr Gln Ala Arg Tyr Arg Ser Asp Pro Asn Leu Ala Arg Tyr Pro Val
          370             375             380

 20   Lys Pro Gln Pro Tyr Glu Glu Gln Met Arg Ile His Ala Glu Val Ser
      385             390             395                 400

      Arg Ala Arg His Glu Arg Arg His Ser Asp Val Ser Leu Ala Asn Ala
              405             410             415

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      Glu Leu Glu Asp Ser Arg Ile Ser Leu Leu Arg Met Asp Arg Pro Ser
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      Arg Gln Arg Ser Val Ser Glu Arg Arg Ala Ala Met Glu Asn Gln Arg
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      Ser Tyr Ser Met Glu Arg Thr Arg Glu Ala Gln Gly Gln Ser Ser Tyr
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      Pro Gln Arg Thr Ser Asn His Ser Pro Pro Thr Pro Arg Arg Ser Pro
      465             470             475             480

      Ile Pro Leu Asp Arg Pro Asp Met Arg Arg Ala Asp Ser Leu Arg Lys
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      Gln His His Leu Asp Pro Ser Ser Ala Val Arg Lys Thr Lys Arg Glu
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  10  Lys Met Glu Thr Met Leu Arg Asn Asp Ser Leu Ser Ser Asp Gln Ser
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      Glu Ser Val Arg Pro Pro Pro Pro Arg Pro His Lys Ser Lys Lys Gly
          530             535             540
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      Gly Lys Met Arg Gln Val Ser Leu Ser Ser Ser Glu Glu Glu Leu Ala
      545             550             555             560

      Ser Thr Pro Glu Tyr Thr Ser Cys Asp Asp Val Glu Leu Glu Ser Glu
                  565             570             575

      Ser Val Ser Glu Lys Gly Asp Ser Gln Lys Gly Lys Arg Lys Thr Ser
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  25  Glu Gln Gly Val Leu Ser Asp Ser Asn Thr Arg Ser Glu Arg Gln Lys
              595             600             605

      Lys Arg Met Tyr Tyr Gly Gly His Ser Leu Glu Glu Asp Leu Glu Trp
          610             615             620
  30
      Ser Glu Pro Gln Ile Lys Asp Ser Gly Val Asp Thr Cys Ser Ser Thr
      625             630             635             640

      Thr Leu Asn Glu Glu His Ser His Ser Asp Lys His Pro Val Thr Trp
```

```
                    645                 650                 655

    Gln Pro Ser Lys Asp Gly Asp Arg Leu Ile Gly Arg Ile Leu Leu Asn
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    Lys Arg Leu Lys Asp Gly Ser Val Pro Arg Asp Ser Gly Ala Met Leu
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    Gly Leu Lys Val Val Gly Gly Lys Met Thr Glu Ser Gly Arg Leu Cys
10              690                 695                 700

    Ala Phe Ile Thr Lys Val Lys Lys Gly Ser Leu Ala Asp Thr Val Gly
    705                 710                 715                 720

15  His Leu Arg Pro Gly Asp Glu Val Leu Glu Trp Asn Gly Arg Leu Leu
                    725                 730                 735

    Gln Gly Ala Thr Phe Glu Glu Val Tyr Asn Ile Ile Leu Glu Ser Lys
                    740                 745                 750

20  Pro Glu Pro Gln Val Glu Leu Val Val Ser Arg Pro Ile Gly Asp Ile
                    755                 760                 765

    Pro Arg Ile Pro Asp Ser Thr His Ala Gln Leu Glu Ser Ser Ser Ser
25              770                 775                 780

    Ser Phe Glu Ser Gln Lys Met Asp Arg Pro Ser Ile Ser Val Thr Ser
    785                 790                 795                 800

30  Pro Met Ser Pro Gly Met Leu Arg Asp Val Pro Gln Phe Leu Ser Gly
                    805                 810                 815

    Gln Leu Ser Ile Lys Leu Trp Phe Asp Lys Val Gly His Gln Leu Ile
                    820                 825                 830
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     Val Thr Ile Leu Gly Ala Lys Asp Leu Pro Ser Arg Glu Asp Gly Arg
             835             840                 845

5    Pro Arg Asn Pro Tyr Val Lys Ile Tyr Phe Leu Pro Asp Arg Ser Asp
         850             855                 860

     Lys Asn Lys Arg Arg Thr Lys Thr Val Lys Lys Thr Leu Glu Pro Lys
     865             870                 875                 880
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     Trp Asn Gln Thr Phe Ile Tyr Ser Pro Val His Arg Arg Glu Phe Arg
                 885             890                 895

     Glu Arg Met Leu Glu Ile Thr Leu Trp Asp Gln Ala Arg Val Arg Glu
15           900             905                 910

     Glu Glu Ser Glu Phe Leu Gly Glu Ile Leu Ile Glu Leu Glu Thr Ala
             915             920                 925

     Leu Leu Asp Asp Glu Pro His Trp Tyr Lys Leu Gln Thr His Asp Val
20           930             935                 940

     Ser Ser Leu Pro Leu Pro Arg Pro Ser Pro Tyr Leu Pro Arg Arg Gln
     945             950                 955                 960
25
     Leu His Gly Glu Ser Pro Thr Arg Arg Leu Gln Arg Ser Lys Arg Ile
                 965                 970                 975

     Ser Asp Ser Glu Val Ser Asp Tyr Asp Cys Glu Asp Gly Val Gly Val
30           980             985                 990

     Val Ser Asp Tyr Arg His Asn Gly Arg Asp Leu Gln Ser Ser Thr Leu

         995                 1000                1005
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Ser Val Pro Glu Gln Val Met Ser Ser Asn His Cys Ser Pro Ser Gly
1010   1015   1020

5   Ser Pro His Arg Val Asp Val Ile Gly Arg Thr Arg Ser Trp Ser Pro
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Ser Ala Pro Pro Pro Gln Arg Asn Val Glu Gln Gly His Arg Gly Thr
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10   Arg Ala Thr Gly His Tyr Asn Thr Ile Ser Arg Met Asp Arg His Arg
1060   1065   1070

Val Met Asp Asp His Tyr Ser Ser Asp Arg Asp Arg Asp Cys Glu Ala
1075   1080   1085

15   Ala Asp Arg Gln Pro Tyr His Arg Ser Arg Ser Thr Glu Gln Arg Pro
1090   1095   1100

Leu Leu Glu Arg Thr Thr Thr Arg Ser Arg Ser Ser Glu Arg Pro Asp
20   1105   1110   1115   1120

Thr Asn Leu Met Arg Ser Met Pro Ser Leu Met Thr Gly Arg Ser Ala
1125   1130   1135

25   Pro Pro Ser Pro Ala Leu Ser Arg Ser His Pro Arg Thr Gly Ser Val
1140   1145   1150

Gln Thr Ser Pro Ser Ser Thr Pro Gly Thr Gly Arg Arg Gly Arg Gln
1155   1160   1165

30   Leu Pro Gln Leu Pro Pro Lys Gly Thr Leu Glu Arg Ser Ala Met Asp
1170   1175   1180

Ile Glu Glu Arg Asn Arg Gln Met Lys Leu Asn Lys Tyr Lys Gln Val

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        Ala Gly Ser Asp Pro Arg Leu Glu Gln Asp Tyr His Ser Lys Tyr Arg
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        Ser Gly Trp Asp Pro His Arg Gly Ala Asp Thr Val Ser Thr Lys Ser
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  10    Ser Asp Ser Asp Val Ser Asp Val Ser Ala Val Ser Arg Thr Ser Ser
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        Ala Ser Arg Phe Ser Ser Thr Ser Tyr Met Ser Val Gln Ser Glu Arg
                 1250              1255              1260


  15    Pro Arg Gly Asn Arg Lys Ile Ser Val Phe Thr Ser Lys Met Gln Asn
             1265              1270              1275              1280


        Arg Gln Met Gly Val Ser Gly Lys Asn Leu Thr Lys Ser Thr Ser Ile
                          1285              1290              1295


  20    Ser Gly Asp Met Cys Ser Leu Glu Lys Asn Asp Gly Ser Gln Ser Asp
                     1300              1305              1310


  25    Thr Ala Val Gly Ala Leu Gly Thr Ser Gly Lys Lys Arg Arg Ser Ser
                 1315              1320              1325


        Ile Gly Ala Lys Met Val Ala Ile Val Gly Leu Ser Arg Lys Ser Arg
             1330              1335              1340


  30    Ser Ala Ser Gln Leu Ser Gln Thr Glu Gly Gly Gly Lys Lys Leu Arg
             1345              1350              1355              1360


        Ser Thr Val Gln Arg Ser Thr Glu Thr Gly Leu Ala Val Glu Met Arg
                     1365              1370              1375
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Asn Trp Met Thr Arg Gln Ala Ser Arg Glu Ser Thr Asp Gly Ser Met
          1380   1385   1390

5   Asn Ser Tyr Ser Ser Glu Gly Asn Leu Ile Phe Pro Gly Val Arg Leu
          1395   1400   1405

Ala Ser Asp Ser Gln Phe Ser Asp Phe Leu Asp Gly Leu Gly Pro Ala
        1410   1415   1420

10

Gln Leu Val Gly Arg Gln Thr Leu Ala Thr Pro Ala Met Gly Asp Ile
1425   1430   1435   1440

Gln Val Gly Met Met Asp Lys Lys Gly Gln Leu Glu Val Glu Ile Ile
15   1445   1450   1455

Arg Ala Arg Gly Leu Val Val Lys Pro Gly Ser Lys Thr Leu Pro Ala
         1460   1465   1470

20   Pro Tyr Val Lys Val Tyr Leu Leu Asp Asn Gly Val Cys Ile Ala Lys
          1475   1780   1485

Lys Lys Thr Lys Val Ala Arg Lys Thr Leu Glu Pro Leu Tyr Gln Gln
        1490   1495   1500

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Leu Leu Ser Phe Glu Glu Ser Pro Gln Gly Arg Val Leu Gln Ile Ile
1505   1510   1515   1520

Val Trp Gly Asp Tyr Gly Arg Met Asp His Lys Ser Phe Met Gly Val
30   1525   1530   1535

Ala Gln Ile Leu Leu Asp Glu Leu Glu Leu Ser Asn Met Val Ile Gly
        1540   1545   1550

Trp Phe Lys Leu Phe Pro Pro Ser Ser Leu Val Asp Pro Thr Ser Ala
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Pro Leu Thr Arg Arg Ala Ser Gln Ser Ser Leu Glu Ser Ser Thr Gly
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Pro Ser Tyr Ser Arg Ser
1585   1590

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     Arg Gly Arg Pro Ala Pro Thr Pro Ala Ala Ser Gln Pro Pro Pro Gln
            10   15   20

     ccc gag atg ccg gac ctc agc cac ctc acg gaa gag gag agg aaa atc   148
25   Pro Glu Met Pro Asp Leu Ser His Leu Thr Glu Glu Glu Arg Lys Ile
            25   30   35

     atc ctg gct gtc atg gat cgt cag aag aaa gaa gag gag aag gag cag   196
     Ile Leu Ala Val Met Asp Arg Gln Lys Lys Glu Glu Glu Lys Glu Gln
30   40   45   50   55

     tcc gtg ctc aag atc aaa gaa gaa cac aaa gca caa ccg aca cag tgg   244
     Ser Val Leu Lys Ile Lys Glu Glu His Lys Ala Gln Pro Thr Gln Trp
            60   65   70

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ttt ccc ttt agt ggg atc act gaa ctg gta aat aac gtt ctg cag ccc    292
Phe Pro Phe Ser Gly Ile Thr Glu Leu Val Asn Asn Val Leu Gln Pro
            75              80              85
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cag caa aaa caa ccc aat gag aag gag ccc cag aca aag ctg cac caa    340
Gln Gln Lys Gln Pro Asn Glu Lys Glu Pro Gln Thr Lys Leu His Gln
            90              95              100
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caa ttt gaa atg tat aag gag caa gtc aag aag atg gga gag gaa tcg    388
Gln Phe Glu Met Tyr Lys Glu Gln Val Lys Lys Met Gly Glu Glu Ser
            105             110             115
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cag cag cag caa gag cag aag ggt gat gcc ccg acc tgt ggc atc tgc    436
Gln Gln Gln Gln Glu Gln Lys Gly Asp Ala Pro Thr Cys Gly Ile Cys
120             125             130             135
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cac aag aca aaa ttt gca gat gga tgc ggc cat aat tgt tcc tat tgc    484
His Lys Thr Lys Phe Ala Asp Gly Cys Gly His Asn Cys Ser Tyr Cys
            140             145             150
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caa acc aag ttc tgt gct cga tgt gga ggt cga gtg tct tta cgc tca    532
Gln Thr Lys Phe Cys Ala Arg Cys Gly Gly Arg Val Ser Leu Arg Ser
            155             160             165
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25

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aac aag gtt atg tgg gtg tgt aat ttg tgc cga aaa caa caa gaa atc    580
Asn Lys Val Met Trp Val Cys Asn Leu Cys Arg Lys Gln Gln Glu Ile
            170             175             180
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ctc act aaa tca gga gca tgg ttt tat aat agt ggg tct aac aca ctg    628
Leu Thr Lys Ser Gly Ala Trp Phe Tyr Asn Ser Gly Ser Asn Thr Leu
            185             190             195
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cag caa cct gat caa aag gtt cct cga ggg ctt cga aat gag gaa gcc    676
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      Gln Gln Pro Asp Gln Lys Val Pro Arg Gly Leu Arg Asn Glu Glu Ala
      200                 205             210                 215

      cct cag gag aag aaa gca aaa cta cac gag cag ccc cag ttc caa gga   724
  5   Pro Gln Glu Lys Lys Ala Lys Leu His Glu Gln Pro Gln Phe Gln Gly
                      220             225                 230

      gcc cca ggt gac tta tca gta cct gca gtt gag aaa ggc cga gct cat   772
 10   Ala Pro Gly Asp Leu Ser Val Pro Ala Val Glu Lys Gly Arg Ala His
                      235             240                 245

      ggg ctc aca aga cag gat act att aaa aat gga tca gga gtg aag cac   820
      Gly Leu Thr Arg Gln Asp Thr Ile Lys Asn Gly Ser Gly Val Lys His
                      250             255             260
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      cag att gcc agt gac atg cct tca gac aga aaa cga agt cca tca gtg   868
      Gln Ile Ala Ser Asp Met Pro Ser Asp Arg Lys Arg Ser Pro Ser Val
                      265             270             275

 20   tcc agg gat caa aat cga aga tac gag caa agt gaa gaa aga gag gac   916
      Ser Arg Asp Gln Asn Arg Arg Tyr Glu Gln Ser Glu Glu Arg Glu Asp
      280             285             290             295

      tac tca cag tat gtt cct tca gat ggt aca atg cca aga tct cct tcg   964
 25   Tyr Ser Gln Tyr Val Pro Ser Asp Gly Thr Met Pro Arg Ser Pro Ser
                      300             305             310

      gat tat gct gat aga cga tct cag cgt gag cct caa ttt tat gaa gaa   1012
 30   Asp Tyr Ala Asp Arg Arg Ser Gln Arg Glu Pro Gln Phe Tyr Glu Glu
                      315             320             325

      cct ggt cat tta aat tac agg gat tct aac agg aga ggc cat aga cat   1060
      Pro Gly His Leu Asn Tyr Arg Asp Ser Asn Arg Arg Gly His Arg His
                      330             335             340
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tcc aaa gag tat att gtg gat gat gaa gat gtg gag agc aga gat gaa   1108
Ser Lys Glu Tyr Ile Val Asp Asp Glu Asp Val Glu Ser Arg Asp Glu
345   350   355

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tat gaa aga caa agg aga gag gag gaa tac cag gca cgc tac aga agt   1156
Tyr Glu Arg Gln Arg Arg Glu Glu Glu Tyr Gln Ala Arg Tyr Arg Ser
360   365   370   375

10   gat cca aat ctg gcc cgg tat ccc gta aag cca caa ccc tac gaa gaa   1204
Asp Pro Asn Leu Ala Arg Tyr Pro Val Lys Pro Gln Pro Tyr Glu Glu
380   385   390

caa atg cgc atc cac gct gag gtg tcc agg gca cga cat gag aga agg   1252
15   Gln Met Arg Ile His Ala Glu Val Ser Arg Ala Arg His Glu Arg Arg
395   400   405

cac agt gat gtt tct ttg gca aac gct gaa cta gaa gat tcc agg att   1300
His Ser Asp Val Ser Leu Ala Asn Ala Glu Leu Glu Asp Ser Arg Ile
410   415   420
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tct ctg cta agg atg gat aga cca tca agg caa aga tct gta tct gaa   1348
Ser Leu Leu Arg Met Asp Arg Pro Ser Arg Gln Arg Ser Val Ser Glu
425   430   435

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cgt aga gct gca atg gaa aac caa cga tcg tat tca atg gaa aga act   1396
Arg Arg Ala Ala Met Glu Asn Gln Arg Ser Tyr Ser Met Glu Arg Thr
440   445   450   455

30   cga gag gct cag gga caa agt tct tat cca caa agg acc tca aat cat   1444
Arg Glu Ala Gln Gly Gln Ser Ser Tyr Pro Gln Arg Thr Ser Asn His
460   465   470

agt cct ccc acc cct cgg cgg agc cct ata ccg ctt gat aga cca gac   1492

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        Ser Pro Pro Thr Pro Arg Arg Ser Pro Ile Pro Leu Asp Arg Pro Asp
                    475                 480                 485


        atg agg cgc gct gac tcc cta cgg aaa cag cac cac tta gat ccc agc    1540
     5  Met Arg Arg Ala Asp Ser Leu Arg Lys Gln His His Leu Asp Pro Ser
                    490                 495                 500


        tct gct gtg agg aaa acg aag cga gaa aaa atg gaa acc atg tta agg    1588
    10  Ser Ala Val Arg Lys Thr Lys Arg Glu Lys Met Glu Thr Met Leu Arg
            505                 510                 515


        aat gat tct ttg agt tca gac cag tcc gag tca gtg agg ccg ccc cca    1636
        Asn Asp Ser Leu Ser Ser Asp Gln Ser Glu Ser Val Arg Pro Pro Pro
        520                 525          ·    530                 535
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        cca agg cct cat aaa tcc aag aaa gga ggt aaa atg cgc cag gtt tca    1684
        Pro Arg Pro His Lys Ser Lys Lys Gly Gly Lys Met Arg Gln Val Ser
                    540                 545          ·    550


        ctg agc agc tcg gag gag gag ctg gca tcc aca cct gag tat aca agc    1732
    20  Leu Ser Ser Ser Glu Glu Glu Leu Ala Ser Thr Pro Glu Tyr Thr Ser
                    555                 560                 565


        tgt gat gat gtg gag ctg gaa agc gag agt gtg agt gag aaa ggg gac    1780
    25  Cys Asp Asp Val Glu Leu Glu Ser Glu Ser Val Ser Glu Lys Gly Asp
                570                 575                 580


        agt caa aag gga aaa aga aaa act agt gag cag gga gtt ttg tcg gat    1828
        Ser Gln Lys Gly Lys Arg Lys Thr Ser Glu Gln Gly Val Leu Ser Asp
    30      585                 590                 595


        tct aac acc agg tct gag aga caa aag aaa agg atg tac tat ggt ggc    1876
        Ser Asn Thr Arg Ser Glu Arg Gln Lys Lys Arg Met Tyr Tyr Gly Gly
        600                 605                 610                 615
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cac tct ttg gaa gag gat ttg gaa tgg tct gag cct cag att aag gac 1924
His Ser Leu Glu Glu Asp Leu Glu Trp Ser Glu Pro Gln Ile Lys Asp
      620   625   630

tct ggg gta gat acc tgt agt agc aca acc ctt aac gag gag cat agc 1972
Ser Gly Val Asp Thr Cys Ser Ser Thr Thr Leu Asn Glu Glu His Ser
    635   640   645

cat agt gat aag cac cct gtg acc tgg cag cca tcc aaa gat gga gat 2020
His Ser Asp Lys His Pro Val Thr Trp Gln Pro Ser Lys Asp Gly Asp
    650   655   660

cgc cta att ggt cgt att tta tta aat aag cgt tta aaa gat ggg agt 2068
Arg Leu Ile Gly Arg Ile Leu Leu Asn Lys Arg Leu Lys Asp Gly Ser
    665   670   675

gta cct cga gac tca gga gca atg ctg ggc tta aag gtt gta gga gga 2116
Val Pro Arg Asp Ser Gly Ala Met Leu Gly Leu Lys Val Val Gly Gly
680   685   690   695

aag atg act gaa tca ggt cga ctt tgt gca ttt att acc aaa gta aaa 2164
Lys Met Thr Glu Ser Gly Arg Leu Cys Ala Phe Ile Thr Lys Val Lys
    700   705   710

aaa gga agt tta gct gat act gta gga cat ctt aga cca ggt gat gaa 2212
Lys Gly Ser Leu Ala Asp Thr Val Gly His Leu Arg Pro Gly Asp Glu
    715   720   725

gtc ttg gaa tgg aat ggg agg cta ttg caa gga gcc aca ttt gag gaa 2260
Val Leu Glu Trp Asn Gly Arg Leu Leu Gln Gly Ala Thr Phe Glu Glu
    730   735   740

gtt tac aac att att cta gaa tcc aaa cct gaa cca caa gtt gag ctt 2308

Val Tyr Asn Ile Ile Leu Glu Ser Lys Pro Glu Pro Gln Val Glu Leu
   745   750   755

gtt gtt tca agg cca att gga gat att cct aga ata cct gat agc acg   2356
Val Val Ser Arg Pro Ile Gly Asp Ile Pro Arg Ile Pro Asp Ser Thr
760   765   770   775

cat gca caa ctg gaa tcc agt tct agc tca ttt gaa tct caa aaa atg   2404
His Ala Gln Leu Glu Ser Ser Ser Ser Ser Phe Glu Ser Gln Lys Met
             780   785   790

gac cgt cct tct ata tcc gtt acc tca ccc atg agt cct ggc atg ctg   2452
Asp Arg Pro Ser Ile Ser Val Thr Ser Pro Met Ser Pro Gly Met Leu
        795   800   805

agg gat gtc ccg cag ttc tta tct gga cag ctt tca ata aaa cta tgg   2500
Arg Asp Val Pro Gln Phe Leu Ser Gly Gln Leu Ser Ile Lys Leu Trp
      810   815   820

ttt gac aag gtt ggt cac cag ttg ata gtt aca att ttg gga gca aag   2548
Phe Asp Lys Val Gly His Gln Leu Ile Val Thr Ile Leu Gly Ala Lys
     825   830   835

gat ctc cct tcc agg gaa gat ggg agg cca agg aat cct tat gtt aag   2596
Asp Leu Pro Ser Arg Glu Asp Gly Arg Pro Arg Asn Pro Tyr Val Lys
840   845   850   855

att tac ttc ctt cca gat aga agt gat aaa aat aag aga aga aca aaa   2644
Ile Tyr Phe Leu Pro Asp Arg Ser Asp Lys Asn Lys Arg Arg Thr Lys
             860   865   870

aca gtc aag aaa act ttg gaa ccc aaa tgg aac cag act ttc att tat   2692
Thr Val Lys Lys Thr Leu Glu Pro Lys Trp Asn Gln Thr Phe Ile Tyr
             875   880   885

tct cct gtc cac cga aga gaa ttc cgt gaa cga atg ctg gaa att acc   2740
Ser Pro Val His Arg Arg Glu Phe Arg Glu Arg Met Leu Glu Ile Thr
       890   895   900

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ctt tgg gat caa gct aga gtt cga gaa gaa gag agc gaa ttc tta gga   2788
Leu Trp Asp Gln Ala Arg Val Arg Glu Glu Glu Ser Glu Phe Leu Gly
       905   910   915

   10   gag att tta att gaa ttg gaa aca gct ttg cta gat gat gag ccg cac   2836
Glu Ile Leu Ile Glu Leu Glu Thr Ala Leu Leu Asp Asp Glu Pro His
   920   925   930   935

tgg tat aag ctg cag acc cat gat gtc tcc tca ttg cca ctc cct cgc   2884
   15   Trp Tyr Lys Leu Gln Thr His Asp Val Ser Ser Leu Pro Leu Pro Arg
           940   945   950

cct tcc cca tat ctg ccc cgg agg cag ctc cat gga gag agc cca acg   2932
Pro Ser Pro Tyr Leu Pro Arg Arg Gln Leu His Gly Glu Ser Pro Thr
          955   960   965

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cgc agg ctg caa agg tcg aag aga ata agt gac agt gaa gtg tct gac   2980
Arg Arg Leu Gln Arg Ser Lys Arg Ile Ser Asp Ser Glu Val Ser Asp
       970   975   980

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tac gac tgc gag gat ggc gtg gga gta gtg tca gat tat cga cac aat   3028
Tyr Asp Cys Glu Asp Gly Val Gly Val Val Ser Asp Tyr Arg His Asn
       985   990   995

   30   ggc cgc gat ctt caa agc tcc acg ttg tcg gtg cca gaa caa gtc atg   3076
Gly Arg Asp Leu Gln Ser Ser Thr Leu Ser Val Pro Glu Gln Val Met
   1000   1005   1010   1015

tca tca aat cat tgc tca cca tca ggg tct cct cat cga gta gat gtt   3124

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Ser Ser Asn His Cys Ser Pro Ser Gly Ser Pro His Arg Val Asp Val
            1020                1025                1030

     ata gga agg aca agg tca tgg tcg cct agt gcc cct cct cct caa agg     3172
  5  Ile Gly Arg Thr Arg Ser Trp Ser Pro Ser Ala Pro Pro Pro Gln Arg
            1035                1040                1045

     aat gtg gaa cag ggg cac cga ggg aca cgt gct act ggc cat tac aac     3220
     Asn Val Glu Gln Gly His Arg Gly Thr Arg Ala Thr Gly His Tyr Asn
 10          1050                1055                1060

     aca att agc cga atg gat aga cac cgt gtc atg gat gac cac tac tct     3268
     Thr Ile Ser Arg Met Asp Arg His Arg Val Met Asp Asp His Tyr Ser
            1065                1070                1075
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     tca gat aga gac agg gat tgt gaa gca gca gat aga cag cca tat cac     3316
     Ser Asp Arg Asp Arg Asp Cys Glu Ala Ala Asp Arg Gln Pro Tyr His
            1080                1085                1090                1095

 20  aga tcc aga tca aca gaa caa cgg cct ctc cta gag cgg acc acc acc     3364
     Arg Ser Arg Ser Thr Glu Gln Arg Pro Leu Leu Glu Arg Thr Thr Thr
                      1100                1105                1110

     cgc tcc aga tcc tct gaa cgt cct gat aca aac ctc atg agg tcg atg     3412
 25  Arg Ser Arg Ser Ser Glu Arg Pro Asp Thr Asn Leu Met Arg Ser Met
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     cct tca tta atg act gga aga tct gcc cct cct tca cct gcc tta tcg     3460
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sample of submitted file